

University of Groningen

## Pathways to Childlessness and Late-Life Outcomes

Dykstra, Pearl A.; Wagner, Michael

*Published in:*  
Journal of Family Issues

*DOI:*  
[10.1177/0192513X07303879](https://doi.org/10.1177/0192513X07303879)

**IMPORTANT NOTE:** You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2007

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Dykstra, P. A., & Wagner, M. (2007). Pathways to Childlessness and Late-Life Outcomes. *Journal of Family Issues*, 28(11), 1487. <https://doi.org/10.1177/0192513X07303879>

**Copyright**

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

**Take-down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

# Journal of Family Issues

<http://jfi.sagepub.com>

---

## **Pathways to Childlessness and Late-Life Outcomes**

Pearl A. Dykstra and Michael Wagner  
*Journal of Family Issues* 2007; 28; 1487  
DOI: 10.1177/0192513X07303879

The online version of this article can be found at:  
<http://jfi.sagepub.com/cgi/content/abstract/28/11/1487>

---

Published by:



<http://www.sagepublications.com>

**Additional services and information for *Journal of Family Issues* can be found at:**

**Email Alerts:** <http://jfi.sagepub.com/cgi/alerts>

**Subscriptions:** <http://jfi.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

**Citations** <http://jfi.sagepub.com/cgi/content/refs/28/11/1487>

# Pathways to Childlessness and Late-Life Outcomes

Pearl A. Dykstra

*Netherlands Interdisciplinary Demographic Institute, The Hague  
Utrecht University, Netherlands*

Michael Wagner

*University of Cologne, Germany*

Via a simultaneous analysis of different life course pathways (marital, occupational, and childbearing histories) and different outcomes, this article addresses the question When does childlessness matter in late life and how? Survey data from Amsterdam ( $N = 661$ ) and Berlin, Germany ( $N = 516$ ) are used. Lifelong childlessness results in smaller networks among men and women in Amsterdam and Berlin, and in the Dutch sample it leads to higher income levels. Dutch men who have never had children and Dutch women who have outlived their children have relatively low life satisfaction levels. In Germany, marital history is a more powerful predictor of life satisfaction in old age than parental history. The findings attest to the importance of distinguishing lifelong childlessness from outliving one's children and of considering the consequences of childlessness for a variety of life domains.

**Keywords:** *childlessness; income; life satisfaction; network size; normal expectable life course; parenthood; pathways*

Findings from sociology and gerontology in the past decades have underscored the salience of the parent-child relationship in late life (Connidis, 2001; Mancini & Blieszner, 1989; Rossi & Rossi, 1990; Shanas, 1979; Troll, Miller, & Atchley, 1979). By now, and fortunately, the knowledge that elderly parents are not alienated from their children but rather have high levels of contact and intensive exchanges of help and support is generally undisputed in our disciplines. Much less is known, however, about older adults who do not have these intergenerational linkages, those without children. How do childless older adults organize their supports? What kinds of exchange arrangements have they created, and how effective are they? Childless older adults are often assumed to be at a disadvantage precisely

because they have no children. How valid is this assumption? Are the childless really at a disadvantage? Little attention tends to be given to the possible advantages of childlessness: escape from parenthood responsibilities, worries, and obligations and fewer competing time demands. Not only do we know little about the present circumstances of childless older adults, we also know little about their pasts. In what ways has becoming and being childless shaped their lives? Has the absence of children been of tangential importance or has it dominated all other spheres of life?

Some older adults are childless because they remained unmarried. Others married but did not become parents. We know little about the ways in which these different life paths lend meaning to childlessness in late life. If differences are found, are they attributable to parenthood history or to marital history? Unfortunately, and as discussed more extensively in the introduction to this two-part special issue by Dykstra and Hagestad (2007), the design of many studies of childlessness in old age has been such that this question has remained unanswered: Marital status tends to be defined as the presence or absence of a spouse, meaning that the never married, divorced, and widowed are bunched together in the same "unmarried" category (see, e.g., Glenn & McLanahan, 1981; Keith, 1983; Rempel, 1985; Wu & Pollard, 1998). Do men and women have different pathways? Certainly, the childless who have invested in a partner for a significant portion of their lives enter old age with skills, orientations, and experiences quite different from those who never had such a tie. Our argument is that to find out when and how childlessness matters in late life, one should look not only at the contemporary circumstances of childless older adults and older parents but also to events earlier in the life course. Furthermore, childlessness should be examined in relation to transitions in other life domains. This is what we set out to do in this article, using the perspective of the "normal expectable life" (Neugarten, 1969) as the guiding framework.

---

**Authors' Note:** The findings reported in this article are from the Berlin Aging Study (BASE), which is funded by the Free University of Berlin, the Max Planck Institute for Human Development, the Federal Ministry for Research and Technology, and the Federal Ministry for Family Affairs, Senior Citizens, Women, and Youth; and from the Dutch survey on Living Arrangements and Social Networks of Older Adults (NESTOR-LSN), which is supported by a program grant from the Netherlands Program for Research on Aging (NESTOR), funded by the Ministry of Education, Culture, and Sciences and the Ministry of Health, Welfare, and Sports. Please address correspondence to Pearl A. Dykstra, Netherlands Interdisciplinary Demographic Institute, Postbox 11650, 2502 The Hague, Netherlands; e-mail: dykstra@nidi.nl.

## Childlessness and the Normal Expectable Life

### Rare and Untimely Transitions

Conceptions about the "correct" timing and "normal" patterning of major transitions during the life course are part and parcel of the ideas and expectations of individuals (Hagestad & Neugarten, 1985; Heckhausen, 1990), cultural scripts (Meyer, 1988), and institutional arrangements (Heinz & Krüger, 2001; Leisering & Schumann, 2003; Mayer & Müller, 1986) provided by society at large. In reality, the course people's lives take is often far less orderly than the cultural scripts suggest. People's lives do not always follow the normal expectable pattern. Sometimes, transitions that are part of this pattern, for example, marriage and parenthood, are not made, whereas transitions that are not part of it, for example, divorce or unemployment, are. Furthermore, transitions can be "off-time," that is, far from the modal age at which they usually occur (Hagestad & Neugarten, 1985), or they can be so "disrupting" (Becker, 1997) that those going through them feel "out of time" (Hagestad, 1996).

Deviations from the normal expectable life course tend to have negative consequences (Hogan, 1981; de Jong Gierveld & Dykstra, 1993; Menaghan, 1989; Rindfuss, Swicegood, & Rosenfeld, 1987). To understand these consequences, Hagestad (1991) distinguished rare transitions and untimely transitions. Those following nonprevalent or statistically rare lives occupy a deviant position relative to peers, a situation that is often accompanied by feelings of being excluded and marginalized. Such experiences are described by a childless older woman in a qualitative study performed by Alexander, Rubinstein, Goodman, and Luborsky (1992): "Well, you come with other women and everybody starts talking about their children, then you feel like an outsider" (pp. 624-625). Statistical rareness also implies there is little "consensus information" on how to act and on what to expect (Gurin & Brim, 1984): People have to find their own way and cannot rely on group support. A lack of consensus information is characteristic of untimely transitions as well. Those going through transitions in a different sequence or off schedule do not have appropriate sources of feedback and information and a group of peers with whom to share experiences. The lack of anticipatory socialization is assumed to underlie the negative consequences of unanticipated events. Having had no preparatory rehearsal, people are caught off guard, without knowledge of behavioral codes and effective behavioral responses.

## Multiple Pathways

What insights do we gain from viewing childlessness in terms of the normal expectable life course? Probably the most important is that childlessness should not always be envisaged as a deviation from a cultural script. First, it is crucial to look at childlessness in connection with marital history. Being married, but not having children, is a life path most older adults did not expect. However, among those who did not marry, childlessness is not a life course violation. In the cohorts we are studying, remaining unmarried implied remaining childless. For the ever-married, the situation is different. In this group, childlessness does form a deviation from the normal expectable life course. In other words, the implications of childlessness are likely to vary according to a person's marital history. We argue that childlessness might have negative consequences for the ever married but not for the never married.

To understand the way childlessness has impinged on the lives of older adults, one should consider not only their marital history but also their occupational history. The three life pathways of parenthood, marriage, and employment are closely linked. Older adults without children—and women in particular—have had different occupational careers than those who became parents (Dykstra & Fokkema, 2000; Dykstra & Liefbroer, 1995; Müller, 1983). The absence of child-rearing responsibilities seems to have better enabled them to devote themselves to occupational pursuits. The work patterns of never-married women stand out. These women had lengthy careers and reached relatively high positions in the occupational structure. Of course we cannot rule out the possibility that certain groups of women never had children in marriage or never even married because their work took precedence over family aspirations. Note that the contemporary institutional context was not conducive to the employment of mothers either. Up until the late 1950s, many European countries legally restricted the combination of employment and motherhood (Arber & Ginn, 1991; Pott-Buter, 1993). By considering the occupational history, we draw attention to a life domain where the childless appear to fare better than parents do, at least as far as women are concerned.

The perspective of the normal expectable life also makes us sensitive to the reasons for childlessness. Being married but not having children is a deviation from life course expectations in the sense of the nonoccurrence of an anticipated transition, or, as stated by Connidis and McMullin (1993), Childlessness may “involve a transition from expected parenthood to accepting childlessness” (p. 630). This citation refers to those who have always been childless. A number of older adults, however, have become childless because they have outlived their offspring. Here childlessness is the occurrence of

an unanticipated transition, an untimely loss. Parents do not expect to live longer than their children do. Losing a child is also a statistically rare transition. Coping with the loss of a child tends to be a lonely, devastating, and extended process (Margolis, Kutscher, & Marcus, 1988; Rubin, 1993). For that reason, we expect to find that the loss of children has a greater negative impact on older adults' well-being than does never having had children.

Third, the perspective of the normal expectable life gives us reason to believe that childlessness might work out quite differently for men and women. A consideration of gender is important because of the differential importance of parenthood for men and women. Although considerable variations in expectations exist, one can generally say that motherhood is and was more focal to women's life course expectations, whereas gainful employment is and was more focal to men's. Parenthood brings greater fulfillment to women than men (Veroff, Douvan, & Kulka, 1981). Parenthood generally has greater consequences for the organization of women's lives than it does for men's (McLanahan & Adams, 1987; Moen, 1995). Presumably, then, the ramifications of not entering the parental role are greater for women than for men. Will we find evidence that childlessness has more adverse consequences for women than men? Or is there a flip-side, and do we find that childless women—in terms of socioeconomic status, for example—are better off than their male counterparts?

## Multiple Outcomes

In this article, we look at parenthood in relation to older adults' marital history and occupational history. Our aim is to unravel the relative importance of transitions in the three life domains for outcomes late in life. In doing so, we examine whether the interlinkages between the three life pathways differ between men and women. We look at not only different life course pathways but also at a set of life outcomes. Does being childless cut across all spheres of life and in similar ways, or do the implications differ according to the outcome being studied? The consequences of childlessness might be quite different, depending on the life domain under investigation. The focus in this article is on social status outcomes that influence older adults' life chances and more particularly their social capital (network size) and economic capital (income), along with the psychological status outcome of well-being (life satisfaction). Two sets of data are used: the 1992 Dutch survey on the Living Arrangements and Social Networks of Older Adults (NESTOR-LSN) and the 1990-1991 Berlin Aging Study (BASE).

We selected indicators of social and economic capital because they are the products of the acquisitions and investments older adults have made and

the socially structured opportunities they have had during the course of their lives. In this sense they are late-life reflections of people's biographical and historical pasts. The social network mirrors the contexts in which older adults have operated—family, marriage, work, neighborhood, church, leisure—and the efforts they have expended to create and maintain norms of obligation and commitment, and feelings of affection and caring, in their relationships with others. Older adults' income is composed largely of occupation-based and state-provided pensions. Given the low rates of participation in the labor market for married women in the cohorts under investigation (Liefbroer & Dykstra, 2000; Müller, 1983), their income is generally not based on their own occupational past but on pension rights derived through marriage.

Network size and income are relatively objective outcome measures, whereas life satisfaction is clearly more subjective. We included the latter measure because it tells us how older adults evaluate their circumstances—compared to their expectations or compared to how peers are faring.

## Sources of Data

The German data come from BASE, which is a multidisciplinary investigation of old people age 70 to older than 100 years who live in former West Berlin. An initial sample of 2,297 old persons was drawn from the obligatory city register for use in the field. Of these addresses 83% could be verified, resulting in a sample of 1,908 old persons who were asked to participate in the study. Of these, 32% refused outright to take part, and a further 2% could not take part for health or other reasons. Forty-nine percent ( $N = 928$ ) took part in the Intake Assessment. In the main study (1990-1993), a core sample of 516 individuals was closely examined in 14 sessions covering their mental and physical health, their psychological functioning, and their social and economic situation. This core sample was stratified by age and sex with 43 men and 43 women in each of the six age groups (70-74, 75-79, 80-84, 85-89, 90-94, and 95+). The current analysis is based on data from the core sample. For more information, see the BASE home page (<http://www.base-berlin.mpg.de/>), or Baltes and Mayer (1999).

The Dutch data come from NESTOR-LSN in the context of which 4,494 men and women were interviewed in 1992. To facilitate comparisons across age groups and between males and females, the sample was stratified according to sex and year of birth, and about equal numbers of men and



women in each 5-year cohort from 1903 to 1937 were drawn from the population registers. Older adults in private households and in institutions were included in the sample. The overall response rate was 62% (32% declined participation, and 6% were too ill to be interviewed). More detailed information on data collection and nonresponse can be found on the NESTOR-LSN home page ([http://www.lasa-vu.nl/lsn\\_data\\_collections\\_overview.html](http://www.lasa-vu.nl/lsn_data_collections_overview.html)) and in Broese van Groenou, van Tilburg, de Leeuw, and Liefbroer (1995). To make the Dutch sample as closely comparable as possible to the German sample, only data from the respondents age 70 to 89 at the time of the interview (birth cohorts 1903-1922) and residing in the city of Amsterdam are used ( $N = 661$ ).

In BASE and NESTOR-LSN, questions were posed on a wide variety of topics, including the availability of family members, network size, supportive exchanges, well-being, life histories, social background, and personality characteristics. Respondents who were physically unable to answer the complete questionnaire were asked a set of key questions. Only partial information is available for them. Questions on income were presented to older adults in private households only, not to older adults who had been admitted to institutional facilities. Furthermore, some respondents did not know their income or refused to reveal their current income. In NESTOR-LSN, 17.8% of all respondents had missing values for the income measure; in BASE, this was so for 24.6% of all respondents. The higher percentage of missing cases in the Berlin sample is attributable to the higher percentage of cognitively impaired respondents or respondents residing in homes for the elderly (Wagner & Motel, 1996). As a result, the number of respondents varies between analyses. The analyses on network size and life satisfaction are based on 661 (NESTOR-LSN) and 516 (BASE) respondents; those on income are based on 572 (NESTOR-LSN) and 389 (BASE) respondents.

The Dutch respondents are younger than the German. The mean ages for women are 80.0 and 85.1 years old, respectively. The mean ages for men are 80.1 and 84.7 years old, respectively. Note that these are age means for stratified samples. For reasons of parsimony, we often refer to the NESTOR-LSN Amsterdam subsample as "the Dutch" and to the West Berlin (BASE) sample as "the German."

## Inventory of Life Histories

Although the expectations people have about the course their lives will take vary considerably across time and place (Riley, 1986), we suggest that

most older adults in the Netherlands and Germany will have grown up with a set of rather standardized, gender-specific expectations concerning their future. A broad and somewhat loose description of these expectations suffices for present purposes. As regards the family domain, men expected to marry and have children early in the life course, they did not expect to go through a divorce or to lose children by death, and they did not expect to become widowers or perhaps only at a very advanced age. As regards the occupational domain, men expected to be gainfully employed until about the median retirement age. Also, most men likely anticipated some upward occupational mobility in the course of their career. Women's expectations in the family domain closely matched those of males, although women were probably more likely to anticipate the possible death of their spouse. As regards the occupational domain, these birth cohorts of women anticipated leaving the labor force at marriage or first childbirth and not to return. Although female employment at later ages has become somewhat more common in recent years (Liefbroer & Dykstra, 2000; Statistisches Bundesamt, 2002), women's expectations on this issue were not clear-cut.

The BASE and NESTOR-LSN surveys have charted older adults' parenthood, marriage, and occupational histories. Tables 1a and 1b provide a description of their life histories. Note that the descriptive information is based on unweighted data. In other words, we are not reporting (estimates of) population data but sample characteristics. Although we have tried to make the Dutch and the German sample as comparable as possible, one distinct difference remains: The oldest old are not included in the Dutch sample. Insofar as life transitions are linked to age (e.g., outliving one's children, widowhood), differences between the two samples will be apparent.

## Parenthood History

In BASE and NESTOR-LSN, information was collected on the age at which respondents had children and at which they experienced the death of children. Four parenthood histories are distinguished based on these data. Older adults with living children are distinguished from those without living children. Among those without living children, the distinction is drawn between those who have always been childless and those who have outlived all their children. Among those with living children, the distinction is drawn between those who never experienced the death of a child and those who have.

A comparison of Tables 1a (for the Dutch) and 1b (for the German) shows that lifetime childlessness is rather high among older adults in West

**Table 1a**  
**Descriptive Information on the Dutch Respondents' Life**  
**Histories and Late-Life Outcomes (percentages**  
**and means unweighted)**

	Men ( <i>n</i> = 355)	Women ( <i>n</i> = 306)
Parenthood history (%)		
All children alive	71	62
Never had children	13	22
Lost children, not all	14	13
No surviving children	1	3
Marital history (%)		
In first marriage	55	23
In second or third marriage	13	3
Never married	3	7
Single, after divorce	2	5
Single, after widowhood	21	52
Single, after several dissolved marriages	6	11
Occupational history, exit (%)		
Before age 50	6	61
Between age 50 and age 55	4	7
Age 55 and older	90	32
Occupational history, mobility (%)		
No change	40	66
Small upward change	41	29
Large upward change	19	5
Late-life outcomes (means)		
Age	80.1	80.0
Network size	10.9	10.7
Equivalent income (Dutch guilders)	1931	1909
Life satisfaction	4.0	4.0

Source: Living Arrangements and Social Networks of Older Adults (NESTOR-LSN).

Note: The analyses are based on the respondents age 70 and older at the time of the interview, residing in Amsterdam.

Berlin: 23% of the men and 30% of the women never had children. Lower percentages are found in the Amsterdam sample: 13% and 22% for men and women, respectively. Three reasons can be suggested for the higher rates of lifetime childlessness in the German data. The first is the presence of the oldest old in the Berlin sample. The oldest respondents have the highest childlessness rates, which in turn is linked to having experienced the First World War and the Depression (Wagner, Schütze, & Lang, 1999). Both events reduced opportunities to marry, to remarry, or to have children. The second

**Table 1b**  
**Descriptive Information on the German Respondents'**  
**Life Histories and Late-Life Outcomes (percentages**  
**and means unweighted)**

	Men ( <i>n</i> = 258)	Women ( <i>n</i> = 258)
Parenthood history (%)		
All children alive	59	48
Never had children	23	30
Lost children, not all	15	15
No surviving children	3	7
Marital history (%)		
In first marriage	31	4
In second or third marriage	21	2
Never married	3	12
Single, after divorce	3	9
Single, after widowhood	33	57
Single, after several dissolved marriages	9	15
Occupational history, exit (%)		
Before age 50	3	36
Between age 50 and age 55	2	7
Age 55 and older	93	51
Occupational history, mobility (%)		
No change	25	35
Small upward change	44	57
Large upward change	31	8
Late-life outcomes (means)		
Age	84.7	85.1
Network size	10.2	9.3
Equivalent income (German marks)	2379	1962
Life satisfaction	3.8	3.6

Source: The Berlin Aging Study (BASE).

reason concerns peculiarities of the West Berlin older population, more specifically, the relatively high proportion of widows and divorcées (Maas, Borchelt, & Mayer, 1999). The third reason pertains to cross-national differences in lifetime childlessness: Childlessness rates in cohorts born before 1925 have been higher in Germany than in the Netherlands (reflecting lower marriage rates in Germany). In both cities, the proportion of those childless women was above the national average and likely reflects selective migration patterns, with never-married individuals moving into the city and families moving away. Both cities show higher rates of lifetime childlessness for women than men. Women more often remained unmarried than men and were less likely to remarry after widowhood or divorce (Dorbritz

& Schwarz, 1996; see also Hagestad & Call, 2007, in this two-part special issue). The West Berlin sample also has a higher proportion of men and women who have outlived their children. This difference is probably attributable to their higher average age. In the German sample, 3% of the men and 7% of the women lost all their children. The figures for the Dutch sample are 1% and 3% for men and women, respectively.

## Marital History

BASE and NESTOR-LSN have complete information on the year in which marital and nonmarital unions started and ended and on the type of union dissolution. Given the relatively low percentages of respondents who were cohabiting unmarried at the time of the interview or who had ever lived with a partner without being married (Dykstra, 2004; Wagner et al., 1999), no distinction between marital and nonmarital unions is made, and for reasons of convenience, "marriage" terminology is used for both nonmarital and marital unions. Respondents are categorized in seven mutually exclusive categories based on current marital status and past marital history. Among the currently married, the distinction is drawn between men and women in first marriages and those in second or third marriages. The unmarried are distinguished according to whether they have never married or are formerly married. The latter are further divided into four categories: the divorced, the early widowed (i.e., before age 65 for women and before age 70 for men), the late widowed (i.e., age 65 and older for women and 70 and older for men), and finally those who experienced the dissolution of two or more marriages.

A comparison of Tables 1a and 1b shows that the distribution of respondents over the marital history categories differs between the two samples. This difference is, of course, attributable to the representation of the age 90 and older in BASE. In both samples, the majority of men are married (almost 70% of Dutch men and more than 50% of German men; most are in first marriages). The NESTOR-LSN sample has a higher proportion of married women than the BASE sample (26% vs. 6%). Both samples have lower proportions of never-married men than never-married women. About 3% of Dutch men, 3% of German men versus 7% of Dutch women, and 12% of German women never married. Among the formerly married, the proportion of those widowed is much higher than that of divorced and separated. The German sample has relatively more widows and widowers. Whereas 21% of Dutch men, 33% of German men, 52% of Dutch women, and 57% of German women are single as the result of the death of their last (and possibly only)

spouse, only between 2% and 9% are in that situation because of a divorce. Finally, 6% of Dutch men, 9% of German men, 11% of Dutch women, and 15% of German women are unmarried currently but have been married at least twice in the past.

## Occupational History

Two features of the respondents' occupational careers are considered. The first is labor force exit. The official retirement age in the Netherlands and Germany is 65. However, because of generous early retirement and disability schemes most employees exit the labor force between age 55 and 62 (Henkens & Tazelaar, 1994; Kohli, Rein, Guillemard, & van Gunsteren, 1991; Koller, 2001). Therefore, two categories of respondents are distinguished, namely, those who left the labor force before age 55 (including those who never entered the labor force) and those who exited at age 55 years and older. The large majority of male respondents (90% of the Dutch sample, 93% of the German) left the labor force at age 55 or older. Among women, a majority (68% of the Dutch sample, 51% of the German) left the labor force before age 55. Many women in the cohorts under investigation stopped working for pay at marriage or when the first child was born (Liefbroer & Dykstra, 2000; Müller, 1983).

The second occupational history feature is the degree of upward or downward mobility. Information is available on the first and the last job respondents held. The occupational prestige of both jobs was ascertained, using the occupational prestige scale developed by Sixma and Ultee (1983), with scores ranging from 13 to 87 for the Dutch data, and the occupational prestige scale developed by Wegener (1988), with scores ranging from 20 to 187 for the German data. Three categories of respondents are distinguished based on a comparison of the occupational prestige of the first and last job: those who experienced no upward occupational mobility at all, those who experienced a lifetime upward mobility of fewer than 20 prestige points (the Netherlands and Germany), and those who experienced an upward mobility of more than 20 points (the Netherlands and Germany). In the Dutch sample, none experienced downward mobility. In the German sample, 22% experienced a downward move. Respondents who never entered the labor force are categorized as experiencing no mobility. Whereas the majority of men (60% in the Dutch sample, 75% in the German) were upwardly mobile during their career, this was not true for women (31% in the Dutch sample, 35% in the German). However, most upwardly mobile respondents gained only little prestige during their career. Only 19% of Dutch men, 31%

of German men, 5% of Dutch women, and 8% of German women gained relatively much prestige during the course of their occupational career.

We cannot precisely identify why approximately one in five Germans experienced downward mobility whereas none of the Dutch did. Differential Second World War experiences might be part of the story. Mayer (1988), for example, found that German men born between 1915 and 1925 were almost universally involved in the armed forces. These men lost up to 9 years of occupational engagement because of the war and its aftermath. Dykstra and Liefbroer (1995) found no effects on attained occupational prestige during the life course of Dutch men who entered the labor market in or around the Second World War.

## Questions Guiding the Analyses

Three questions guide the analyses. The first is whether late-life outcomes differ according to parenthood history; that is, do we find differences in network size, income, and life satisfaction among (a) those who still have all their children, (b) those who never had children, (c) those who lost one or more of their children, and (d) those who lost all their children to death? Note that in the NESTOR-LSN analyses, men who lost one or more of their children and those who outlived them all are grouped together because of the small numbers. Of secondary interest is whether observed differences are, in turn, associated with transitions in other life domains, transitions that themselves are linked with parenthood history, such as marrying or pursuing a particular kind of career. In other words, the aim is to find out to what extent observed differences in life outcomes are attributable to parenthood history and to what extent to the pathways in other life domains. The third question addresses the relative importance of parenthood history. Is it a major determinant of late-life outcomes or is its influence rather minor? Does its importance vary depending on the particular life outcome under investigation? Are the associations different for men or women?

Stepwise regressions are performed: The effects of parenthood history are examined first, marital history variables enter the equations second, followed in the third and final step by occupational history variables. Given the gender specificity of social expectations about the occurrence and sequencing of life transitions, the analyses are conducted separately for men and women. Moreover, the analyses control for age. Scores on the life history variables and the outcome measures vary across age groups. For example, the oldest respondents are most likely to be widowed and to have lost their children to

death, just as they are most likely to have the smallest networks (van Tilburg, 1995). To avoid confounding the findings with the effects of age-related processes, age differences are corrected for. Tests for interactions between marital history and parenthood history were performed in all models. None was significant, however.

Unstandardized regression parameter estimates are shown in Tables 2 through 4. For each of the life history variables, these estimates show the difference in the outcome variable between the reference category and the category of interest. For example, in the analysis of network size in Table 2a, a score of  $-3.46$  for Dutch men who never had children means that all things being equal, they have well over three network members fewer than Dutch fathers who never lost a child by death.

## Results

### Differences in Network Size

Network size is the indicator of available social capital. In NESTOR-LSN it is the total number of names listed as those with whom respondents were “in touch regularly” and who were “important” to them (see van Tilburg, 1995, for details on the network delineation procedure). The definitions of “regular contact” and “important” were left to the respondents. To be nominated, network members had to be at least age 18 years. On average, men and women in the Dutch subsample nominated close to 11 network members (unweighted, see Table 1a). In the German sample, the social network was assessed using a modified version of the network questionnaire developed by Kahn and Antonucci (1980). Respondents classified network partners according to the amount of emotional distance. A circle diagram was used: Respondents placed persons to whom they felt to be related very closely into an inner circle, persons to whom they felt to be related closely into a second circle, and those persons to whom they felt to be related less closely into a third circle. On average, men nominated around 10 and women around 9 persons (unweighted, see Table 1b).

It is not surprising to note that network size is inversely associated with age (see Table 2a for the Dutch sample and Table 2b for the German). This pattern is found in the NESTOR-LSN and the BASE data and among men and women. Given that the age differences in network size continue to exist after controlling for parenthood, marital, and occupational history, age might



**Table 2a**  
**Unstandardized Regression Coefficients, Selected**  
**Models Network Size**

	Men ( <i>n</i> = 355)			Women ( <i>n</i> = 306)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant	10.50**	11.92**	11.39**	11.28**	13.36**	12.75**
Current age <sup>a</sup>	-.29**	-.24**	-.27**	-.19**	-.13**	-.14**
Parenthood history (vs. all children alive)						
Never had children	-3.46**	-1.59	-1.51	-2.35**	-2.86*	-2.76*
Lost children, not all <sup>b</sup>	—	—	—	-.38	-.20	-.17
No surviving children <sup>b</sup>	-.86	-.55	-.44	-2.58*	-2.56*	-2.56*
Marital history (vs. in first marriage)						
Second marriage		-3.18*	-3.16*		-4.51*	-5.12*
Never married		-2.74*	-2.89*		-.58	-.78*
Single, after divorce		-5.85**	-5.25**		-4.05*	-3.76**
Single, after widowhood		-3.40**	-3.54*		-2.77*	-2.54*
Single, after several dissolved marriages		-3.03*	-3.35*		-2.48*	-2.49**
Occupational history, exit (vs. after age 55)						
Between age 50 and age 55			-1.49			-.58
Before age 50			-3.29*			-1.84*
Occupational history, mobility (vs. no change <sup>c</sup> )						
Small upward change			.98			-.32
Large upward change			1.89			1.09
Adjusted <i>R</i> <sup>2</sup>	.05	.08	.09	.03	.07	.08

Source: Living Arrangements and Social Networks of Older Adults (NESTOR-LSN).

a. Defined as deviation from the mean age.

b. Among men, these categories are taken together.

c. Includes respondents who never had a paid job.

\**p* < .05. \*\**p* < .01.

indicate health status that is positively associated with network size (van Tilburg, 1995; Wagner & Wolf, 2001).

Lifelong childlessness clearly results in smaller networks in old age. We see this among men and women and in both data sets. The results of the stepwise regressions indicate that the effect of lifetime childlessness is quite independent of marital history, with one exception: Among Dutch men, the coefficient for lifetime childlessness loses significance once marital history is taken into account. In other words, parenthood is relevant for Dutch men

**Table 2b**  
**Unstandardized Regression Coefficients, Selected**  
**Models Network Size**

	Men ( <i>n</i> = 258)			Women ( <i>n</i> = 258)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant	10.23**	10.98**	10.44**	9.94**	13.99**	15.31**
Current age <sup>a</sup>	-.24**	-.23**	-.23**	-.25**	-.23**	-.22**
Parenthood history (vs. all children alive)						
Never had children	-2.64**	-2.11*	-2.20*	-2.21**	-1.97	-2.02*
Lost children, not all	3.42**	3.84**	3.76**	1.28	1.40	1.50
No surviving children	-.76	-.70	-.77	-1.84	-1.93	-1.90
Marital history (vs. in first marriage)						
Second marriage		-.53	-.47		-.80	-.36
Never married		-3.16	-2.99		-4.23	-4.79*
Single, after divorce		-7.92**	-7.96**		-7.06**	-7.51**
Single, after widowhood		-1.60	-1.60		-4.27*	-4.43*
Single, after several dissolved marriages		-2.00	-1.87		-3.46	-3.65**
Occupational history, exit (vs. after age 55)						
Between age 50 and age 55			-.21			
Before age 50			-2.92			-1.60**
Occupational history, mobility (vs. no change <sup>b</sup> )						
Small upward change			.52			-1.33
Large upward change			1.37			.50
Adjusted <i>R</i> <sup>2</sup>	.13	.17	.16	.15	.18	.18

Source: The Berlin Aging Study (BASE).

a. Defined as deviation from the mean age.

b. Includes respondents who never had a paid job.

\**p* < .05. \*\**p* < .01.

insofar as it is linked with marriage. For Dutch and German women and for German men, lifetime childlessness is associated with having smaller networks, even after taking into account that many of the lifetime childless never married and for that reason have smaller networks.

Especially the very old might outlive all their children. The loss of all children seems to be more consequential for women's social engagements than men's. Women who have outlived their children have relatively small networks. In the German data set, however, the coefficient for the loss of all

children is not significant, which is likely due to the small size of this subgroup of women. It is surprising to note that the loss of children increases network size for the men in the German sample, if at least one child survived. The networks of Dutch men who have experienced the loss of all children do not differ significantly in size from those of fathers who still have all their children (recall that the men who lost some but not all their children were put in the same category as those who lost all).

Given that childless older adults tend to have smaller networks than parents, the question immediately presents itself of whether the differences in network size are not simply the difference between having children as network members and not having them as network members. Dykstra (1995), using NESTOR-LSN data, and Lang (1994, 2004), using BASE data, showed there is some truth to this supposition. Focusing on the representation in the network of six different types of relationships (siblings, siblings-in-law, other kin, friends, neighbors, and other nonkin), Dykstra revealed that for all types of relationships, with the exception of siblings-in-law, childless older adults had similar or higher levels of involvement compared to parents. However, the greater involvement in relationships such as those with siblings or friends did not match the representation of children (and children-in-law and grandchildren) in the networks of older parents. Lang's analyses indicated no differences between the childless and parents regarding the number of nonkin relationships in the social network. Childless older adults were more likely than parents to include extended kin in their networks. The greater activation of extended kin did not, however, match the numbers of close kin (children and their in-laws and grandchildren) in the networks of older parents.

The pattern of results for marital history differences in network size is remarkably similar across the two countries and for men and women. Older adults who are still in their first marriage (most are men) tend to have the largest number of network members. Those who are single after divorce tend to have the smallest networks. Apart from divorce, never marrying, widowhood, and multiple marital dissolutions across the life course considerably reduce network size in old age. Note, however, that these differences are not always significant within the group of German men.

The introduction of differences in occupational history does not lead to an appreciable change in the parenthood history coefficients. In other words, the differences in network size linked with parenthood history are independent of differences in occupational histories. Differences in network size by marital history are also relatively independent of differences by occupational

history. The relative impact of occupational history on network size is small. The age of exit from the labor force is associated with network size after retirement; however, upward mobility across the life course is not. We find, for Dutch men and women and for German women, that those who exited from the labor market at a relatively young age have relatively small social networks.

The NESTOR-LSN and BASE data show that network size in old age is determined by people's parenthood and marital histories. Model fit is generally low. Taken together, age, parenthood history, marital history, and occupational history explain a higher proportion of the variance in network size in the BASE data than in the NESTOR-LSN data.

## Differences in Equivalent Income

Net income is the indicator of available economic capital. In the NESTOR-LSN survey, a global indicator of household income was obtained by showing respondents in private households a card with income classes in Dutch guilders ( $f$  100  $\equiv$  US \$60). This information was converted into a "quasi"-interval scale by arbitrarily assigning the median value to incomes within each class. To make the household incomes of older adults living alone comparable to those of older adults in households including a partner, a simple family equivalence factor was used: The income of households with a partner was multiplied by a factor of 0.7 (in accordance with the suggestion of Schiepers, 1988). The data provide only a general idea of differences in household income, given the global nature of the income assessment, and given the difficulty in drawing comparisons across households differing in size. The mean equivalent income of men in the Dutch subsample is approximately 1% higher than that of women (the means are 1931 and 1909 Dutch guilders, respectively, see Table 1a). In the German subsample, income was measured by the net income per head weighted by household size (equivalent income). The quality of the BASE income data is described in Wagner and Motel (1996). In the BASE core sample, the income differences between men and women are greater than they are in the NESTOR-LSN subsample. The mean equivalent income of men in the BASE core sample is approximately 21% higher than that of women (the means are 2379 and 1962 German marks, respectively, see Table 1b; DM 100  $\equiv$  US\$70).

The results on differences in equivalent income by parenthood, marital history, and occupational career are presented in Table 3a (for the Netherlands) and Table 3b (for Germany). The pattern of results is quite different for the two

**Table 3a**  
**Unstandardized Regression Coefficients, Selected**  
**Models Equivalent Income**

	Men ( <i>n</i> = 314)			Women ( <i>n</i> = 258)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant	1,903.19**	1,812.83**	1,766.24**	1,849.00**	1,891.65**	1,989.52**
Current age <sup>a</sup>	11.08	3.26	-1.14	-12.61	-5.61	-4.49
Parenthood history (vs. all children alive)						
Never had children	137.80	186.61*	221.52*	287.04*	235.49*	123.15
Lost children, not all <sup>b</sup>	—	—	—	-79.51	-71.78	-61.98
No surviving children <sup>b</sup>	-91.70	-103.69	-123.90	88.17	109.53	90.56
Marital history (vs. in first marriage)						
Second marriage		225.83*	293.25*		912.79*	893.30*
Never married		-427.23*	-367.04*		101.17	109.53
Single, after divorce		125.72	193.25		-94.37	-236.89*
Single, after widowhood		254.60*	219.98**		-247.16*	-247.16*
Single, after several dissolved marriages		922.99**	865.73**		213.98	190.81
Occupational history, exit (vs. after age 55)						
Between age 50 and age 55			-469.33*			-297.97*
Before age 50			-550.15*			-383.34*
Occupational history, mobility (vs. no change <sup>c</sup> )						
Small upward change			226.74*			14.73
Large upward change			333.51*			238.37*
Adjusted <i>R</i> <sup>2</sup>	.01	.07	.10	.01	.05	.06

Source: Living Arrangements and Social Networks of Older Adults (NESTOR-LSN).

Note: The analyses are based on noninstitutionalized respondents only.

a. Defined as deviation from the mean age.

b. Among men, these categories are taken together.

c. Includes respondents who never had a paid job.

\**p* < .05. \*\**p* < .01.

countries. Whereas parenthood history is associated with income differences in the Netherlands, there is no such association in the German data. In the Dutch data, we see that those who have never had children tend to have higher incomes than parents. It is interesting to note that the difference in income between childless men and male parents in the Netherlands emerges only after marital history is taken into consideration. The finding suggests that what appears to be the absence of parenthood history differences in the

**Table 3b**  
**Unstandardized Regression Coefficients, Selected**  
**Models Equivalent Income**

	Men ( <i>n</i> = 208)			Women ( <i>n</i> = 181)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant	2,370.84**	1,909.19**	1,782.59**	1,992.57**	1,904.37**	1,892.82**
Current age <sup>a</sup>	14.92	-2.40	-2.50	-2.44	-3.57	-3.68
Parenthood history (vs. all children alive)						
Never had children	156.78	288.00	257.44	-23.02	-141.08	-143.53
Lost children, not all	18.08	-15.38	-71.02	152.93	-222.31	-227.94
No surviving children	-608.00	-833.17	-826.60	-62.87	-153.89	-159.36
Marital history (vs. in first marriage)						
Second marriage		398.92	348.41		-598.40	-574.66
Never married		-512.19	-407.81		392.72	420.32
Single, after divorce		123.20	139.92		-229.79	-205.67
Single, after widowhood		878.07**	887.27**		154.75	165.53
Single, after several dissolved marriages		920.86**	892.34**		260.80	281.03
Occupational history, exit (vs. after age 55)						
Between age 50 and age 55			-297.78			27.59
Before age 50			-664.87			17.38
Occupational history, mobility (vs. no change <sup>b</sup> )						
Small upward change			227.27			-6.94
Large upward change			279.60			-80.39
Adjusted <i>R</i> <sup>2</sup>	.00	.07	.06	-.02	.01	-.01

Source: The Berlin Aging Study (BASE).

a. Defined as deviation from the mean age.

b. Includes respondents who never had a paid job.

\*\**p* < .01.

first step of the analysis is actually the product of two opposing tendencies: Lifetime childlessness among never-married males is associated with relatively low income levels, whereas lifetime childlessness among ever-married males is associated with relatively high income levels.

Marital history accounts for income differences among Dutch men, Dutch women, and German men but not among German women. The findings for men in the two countries are quite similar: Compared to men in first marriages, the never married have relatively low incomes, whereas those in second marriages, those who are single after widowhood, and those who are single after

several marital dissolutions have relatively high incomes. Note, however, that not all the marital history coefficients reach levels of significance in the BASE data for men. Among Dutch women, we see relatively high income levels for those in second marriages and relatively low income levels for divorcees.

The impact of occupational history on late-life income differs between the two countries. In the Netherlands, income levels are associated with the age of labor force exit and occupational mobility; in Germany, they are not. Dutch men and women who left the labor force relatively early, and those who experienced little upward mobility during the course of their careers, have relatively low incomes. Table 3a shows furthermore that after occupational history has been taken into account, parenthood status differences in income among Dutch women are no longer significant. This finding is contrary to what is observed among Dutch men, where parenthood history continues to be responsible for income differences when differences in marital history and occupational history have been considered. This is not to suggest that childlessness is not relevant for Dutch women. The pattern of changes between Models 2 and 3 suggests that the incomes of women who never had children are relatively high because they were likely to exit the labor market at a relatively late age and to experience upward occupational mobility.

In the Netherlands, parenthood makes a difference for late-life income, albeit a limited one: The effects on income of parenthood history are smaller than those of marital history and occupational history. In Germany parenthood history does not make a difference for late-life income. In previous analyses of the BASE data, Motel and Wagner (1993) found that widowhood enhances income, particularly for men. Divorce does not seriously reduce late-life income. Furthermore, educational level and job prestige are better predictors of the income of German older adults than are patterns of social mobility and the timing of labor force exit.

## Differences in Life Satisfaction

Life satisfaction is the indicator of subjective well-being. In both surveys, a single-item question was used (Andrews & Withey, 1976). The formulations differed slightly. The question in NESTOR-LSN was "Taking all things together, how satisfied or dissatisfied are you with your life in general?" In BASE, the question was "How satisfied are you with your life at present?" The answer categories range from 1 (*very dissatisfied*) to 5 (*very satisfied*). The Dutch respondents gave higher life satisfaction ratings than the German respondents. In the Netherlands, men and women had a mean score

of 4.0 (see Table 1a). In Germany, the mean score was 3.8 for men and 3.6 for women (see Table 1b).

Tables 4a (for NESTOR-LSN) and 4b (for BASE) show the results of the analyses of differences in life satisfaction. The Dutch data show significant links between parenthood history and life satisfaction, unlike the German data where no associations between parenthood history and life satisfaction are found. In the Dutch data, the associations between parenthood history and life satisfaction differ between men and women. Among Dutch men, those who never had children have relatively low levels of life satisfaction. This difference holds for Dutch men regardless of their marital history and occupational history. Among Dutch women, outliving one's children is associated with relatively low levels of life satisfaction. This difference also holds for Dutch women regardless of their marital history and occupational history. Unlike the NESTOR-LSN data, the BASE data show that lifetime childlessness is not associated with general life satisfaction even if marital history is not controlled. In case of "late" childlessness (outliving one's children), the coefficients are higher but not significant.

Parallels between the two countries do emerge for the impact of marital history on life satisfaction. In both countries, we see relatively low levels for men and women who are single after widowhood. Both countries also show relatively low life satisfaction levels for women who are single after having experienced several marital dissolutions. Finally, the German data show negative effects of divorce for women: Single divorcees are relatively dissatisfied with their lives. This pattern is not observed for the Netherlands; neither are negative effects of divorce found for German men. The findings for occupational history show no significant associations with life satisfaction, with one exception: Dutch men who left the labor force at a relatively early age (usually as the result of unemployment or disability) are relatively dissatisfied with life.

Parenthood history, marital history, and occupational history appear to be poor predictors of life satisfaction in old age. The magnitude of the associations is rather small, which in turn is possibly a measurement artifact. The life satisfaction measure consisted of only a single—rather generally phrased—item. In response to this item, most people say they are satisfied, which is why there is little variability in answers. Taken together, parenthood, marital history, and occupational career only account for between 1% and 4% of the variance. Another reason for the very low explanatory power of the models is that health variables, institutionalization, and subjective domain evaluations are not included (Smith, Fleeson, Geiselmann, Settersten, & Kunzmann, 1999). However, it is unlikely that inclusion of these measures would change the pattern of results for childlessness.



**Table 4a**  
**Unstandardized Regression Coefficients, Selected**  
**Models Life Satisfaction**

	Men ( <i>n</i> = 355)			Women ( <i>n</i> = 306)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant	3.95**	3.97**	4.07**	3.95**	3.97**	3.98**
Current age <sup>a</sup>	-.00	-.00	-.00	-.00	-.01	-.01
Parenthood history (vs. all children alive)						
Never had children	-.21*	-.18*	-.18*	-.02	-.04	-.04
Lost children, not all <sup>b</sup>	—	—	—	.01	.02	.02
No surviving children <sup>b</sup>	-.14	-.11	-.09	-.44*	-.46*	-.50*
Marital history (vs. in first marriage)						
Second marriage		.02	.01		-.18	-.18
Never married		-.23	-.18		-.11	-.12
Single, after divorce		-.16	-.15		-.14	-.11
Single, after widowhood		-.24*	-.23*		-.20*	-.21*
Single, after several dissolved marriages		-.17	-.16		-.24**	-.22*
Occupational history, exit (vs. after age 55)						
Between age 50 and age 55			-.24*			-.11
Before age 50			-.14			.04
Occupational history, mobility (vs. no change <sup>c</sup> )						
Small upward change			.00			.04
Large upward change			.14			.10
Adjusted <i>R</i> <sup>2</sup>	.01	.01	.04	.01	.01	.01

Source: Living Arrangements and Social Networks of Older Adults (NESTOR-LSN).

a. Defined as deviation from the mean age.

b. Among men, these categories are taken together.

c. Includes respondents who never had a paid job.

\**p* < .05. \*\**p* < .01.

## Conclusion

Relatively unique to the analyses reported in this article is, first, that they were not limited to one country-specific sample of older people but that elderly in a Dutch and a German city were compared and, second, that a set of different late-life outcomes was examined. That way, we were able to show

**Table 4b**  
**Unstandardized Regression Coefficients, Selected**  
**Models Life Satisfaction**

	Men ( <i>n</i> = 258)			Women ( <i>n</i> = 258)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Constant	3.83**	3.98**	3.98**	3.58**	4.29**	4.50**
Current age <sup>a</sup>	-.01	.00	.00	.00	-.01	-.01
Parenthood history (vs. all children alive)						
Never had children	-.03	.02	.03	.02	-.29	-.08
Lost children, not all	-.09	-.06	-.07	.09	.14	.14
No surviving children	-.24	-.21	-.22	.25	.28	.27
Marital history (vs. in first marriage)						
Second marriage		.01	.01		-.56	-.60
Never married		-.45	-.44		-.32	-.58
Single, after divorce		-.35	-.32		-.99**	-1.04**
Single, after widowhood		-.34*	-.35*		-.73*	-.74*
Single, after several dissolved marriages		-.37	-.38		-.84**	-.84**
Occupational history, exit (vs. after age 55)						
Between age 50 and age 55			-.22			-.11
Before age 50			-.34			.17
Occupational history, mobility (vs. no change <sup>b</sup> )						
Small upward change			.04			-.26
Large upward change			.03			-.07
Adjusted <i>R</i> <sup>2</sup>	-.01	.01	.00	.01	.01	.02

Source: The Berlin Aging Study (BASE).

a. Defined as deviation from the mean age.

b. Includes respondents who never had a paid job.

\**p* < .05. \*\**p* < .01.

that the consequences of childlessness are not necessarily uniform in different countries and across all life domains: In some domains, childlessness has particular advantages, in others it has disadvantages or it has no effects at all. For example, having remained childless is associated with smaller networks among men and women in Amsterdam and Berlin, and in the Dutch sample it also leads to higher income levels. As Houser, Berkman, and Beckman (1984) argued, empirical studies tend to pay attention to the disadvantages of being childless in old age, focusing on the risks of being without necessary supports when the need arises. Less attention has been

paid to the advantages of being without children. The findings reported here can serve to correct this one-sided view of childless older adults.

Drawing on the perspective of the "normal expectable life," we drew attention to never having had children and outliving them, and to childlessness and gender. Consistent with this perspective, the analyses revealed that statements about differences between the childless and those with children virtually always require qualifications, that is, additional references to gender, to marital history, and often to combinations of the two. Moreover, the findings revealed that it is important to draw the distinction between older adults who have always been childless and those who have become childless.

The relative importance of childlessness as a determinant of late-life outcomes varies between men and women, as is evident, for example, in the findings on network size. Among Dutch men, marital history is relevant rather than parenthood history. Analyses revealed that childless Dutch men have relatively small networks—not because they never had children but because they have never married or because they have experienced the dissolution of their marriage. Among the German men and women, lifelong childlessness results in smaller networks independent of their marital history. Those who have children alive have more network members than the childless even if they experienced the death of at least one of their children. Among Dutch women, the pattern is different from men. Even after taking account of marital history, parenthood history remains an important determinant of differences in network size: Dutch women who never had or who have no surviving children have a smaller network than those where all children are still alive. Obviously, in most cases, childlessness and—as a consequence—not having grand- or great-grandchildren results in smaller networks in old age that are not compensated by a higher number of nonkin network members.

The analyses of differences in income provide further indications that the links between parenthood and marital history on one side and economic resources on the other side differ between the countries. In Germany, parenthood history is not related to the income level of elderly men or women. For women, also the marital history does not account for income differences. Only widowers and those single men with a number of dissolved marriages have an income that is higher than the income of their male counterparts who are still living in their first marriage. In the Netherlands, the pattern for men is similar to the German one; however, the effects are more pronounced. Those who never had children receive a higher income than fathers even if their marital and occupational histories have been taken into account. Never-married men

have the lowest incomes. This finding possibly reflects selection into marriage: Economically disadvantaged men have lower chances of entering marriage (Bernard, 1982; Oppenheimer, 1994). Among women, the single divorced or widowed—regardless of parental status—have the lowest incomes, and those women who are in their second marriage have the highest.

Life satisfaction is the last outcome measure we considered. In general, a very low proportion of its variance could be explained by our models. Here again, the findings show that childlessness can work out quite differently for men and women, but not in the way we had expected. In the Netherlands, but not in Germany, men's life satisfaction is negatively associated with lifetime childlessness—regardless of marital and occupational history. Among Dutch and German women, there are no differences in life satisfaction between those who never had children and those with all children alive. It is not inconceivable that women who remained childless were strongly motivated to rearrange their life goals or to engage in "alternative" pursuits from the outset. They worked hard at carving out a meaningful life off the beaten track of motherhood. The finding that their life satisfaction scores do not differ from those of mothers suggests they have been quite successful. Another remarkable finding is the absence of a difference in life satisfaction, for men and women in the Netherlands and in Germany, between the never- and ever-married old. Presumably, the failure to experience an anticipated transition would have negative consequences—low life satisfaction, for example. Our data provide little evidence for this presumption.

With regard to outliving children, the findings from the Dutch sample again show clear gender differences. Among men, there is no difference in life satisfaction between those with all their children and those who lost one or more of their children to death. It is important to note that men who lost all their children were put in the same category as men who experienced the loss of children but nonetheless still had surviving children. We were not able to examine the effects of outliving *per se* among men. Among women, the results show the lowest levels of life satisfaction for those who outlived their children. A similar pattern can be observed for social network size. Taken together, these results suggest that the social and personal consequences of outliving children are more serious for mothers than for fathers. Dutch women who lost all their children to death fare poorest of all: They have small networks and a low level of life satisfaction.

We should note, however, that the BASE data do not show any effects of outliving one's children on outcomes in later life. This might be due to small numbers in that subgroup. However, it fits into the overall picture that—with the exception of network size—the elderly in Germany have been more

successful in adapting their life to a situation without children than is the case in the Netherlands. In Germany, marital status seems to be a much more powerful predictor of well-being in old age than parental status.

Another distinction that is often made is that between “voluntary” and “involuntary” childlessness. The general consensus is that those who are voluntarily childless achieve higher levels of well-being than do those whose expectations of becoming parents are not met (Connidis & McMullin, 1993; DeOllos & Kapinus, 2002; Veevers, 1980). Infertility is one of the most devastating life experiences (van Balen, 1991; Matthews & Martin-Matthews, 1986). Research on voluntary and involuntary childlessness is largely restricted to younger cohorts than the ones we are studying. Of the respondents in BASE and NESTOR-LSN who never had children, we do not know whether they “chose” to remain childless. It is only in a small minority of cases that childlessness is the result of a conscious decision (Toulemon, 1996). More often it is the result of infertility or of a succession of events with the ultimate consequence that having children “never happened” (Kemkes-Grottenhaler, 2003). Examples of life paths leading to childlessness in the cohorts under investigation are remaining in the parental home to care for elderly parents, marrying late or just before the Second World War, being separated from the spouse during the war, not having sufficient income or suitable housing after the war, and never meeting the right partner (Gierveld, 1969; Wenger, 2001; see also Hagestad & Call, 2007).

Whether childlessness is the result of a conscious decision or not might have implications for the interpretation of the results reported in this article. The findings for the Netherlands show that childless couples have relatively high incomes. What accounts for their relatively favorable socioeconomic circumstances? One possibility is that there was a conscious decision from the start not to have children, so that priority could be given to occupational pursuits. Another possibility is that childlessness was not intended and that subsequent efforts were aimed at “making the best” of the circumstances. Either way, the result is the same: a relatively comfortable financial situation—with concomitant reduced exposure to life stress and safeguards against poor health.

## References

- Alexander, B. B., Rubinstein, R. L., Goodman, M., & Luborsky, M. (1992). A path not taken: A cultural analysis of regrets and childlessness in the lives of older women. *The Gerontologist*, 32, 618-626.
- Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: American's perception of life quality*. New York: Plenum.

- Arber, S., & Ginn, J. (1991). *Gender and later life: A sociological analysis of resources and constraints*. London: Sage.
- Baltes, P. B., & Mayer, K. U. (Eds.). (1999). *The Berlin Aging Study: Aging from 70 to 100*. New York: Cambridge University Press.
- Becker, G. (1997). *Disrupted lives: How people create meaning in a chaotic world*. Berkeley: University of California Press.
- Bernard, J. (1982). *The future of marriage* (2nd ed.). New Haven, CT: Yale University Press.
- Broese van Groenou, M. I., van Tilburg, T. G., de Leeuw, E. D., & Liefbroer, A. C. (1995). Data collection. In C. P. M. Knipscheer, J. de Jong Gierveld, T. G. van Tilburg, & P. A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 185-197). Amsterdam: VU University Press.
- Connidis, I. A. (2001). *Family ties and aging*. Thousand Oaks, CA: Sage.
- Connidis, I. A., & McMullin, J. A. (1993). To have or have not: Parental status and the subjective well-being of older men and women. *The Gerontologist*, 33, 630-636.
- de Jong Gierveld, J., & Dykstra, P. A. (1993). Life transitions and the network of personal relationships: Theoretical and methodological issues. In D. Perlman & W. H. Jones (Eds.), *Advances in personal relationships* (Vol. 4, pp. 195-227). London: Kingsley.
- DeOllos, I. Y., & Kapinus, C. A. (2002). Aging childless individuals and couples: Suggestions for new directions in research. *Sociological Inquiry*, 72, 72-80.
- Dorbritz, J., & Schwarz, K. (1996). Kinderlosigkeit in Deutschland—ein Massenphänomen? Analysen zu Erscheinungsformen und Ursachen [Childlessness in Germany—A mass phenomenon? Analyses of manifestations and causes]. *Zeitschrift für Bevölkerungswissenschaft*, 21, 231-261.
- Dykstra, P. A. (1995). Network composition. In C. P. M. Knipscheer, J. de Jong Gierveld, T. G. van Tilburg, & P. A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 97-114). Amsterdam: VU University Press.
- Dykstra, P. A. (2004). Diversity in partnership histories: Implications for older adults' social integration. In C. Phillipson, G. Allan, & D. Morgan (Eds.), *Social networks and social exclusion: Sociological and policy issues* (pp. 117-141). London: Ashgate.
- Dykstra, P. A., & Fokkema, T. (2000). Partner en kinderen; Belemmerend of bevorderend voor beroepssucces? Beroepsmobiliteit van mannen en vrouwen met verschillende huwelijks- en ouderschapscarrières [Partner and children: Burden or asset for occupational attainment? Occupational mobility of men and women with different marriage and parenthood careers]. *Mens en Maatschappij*, 75, 110-128.
- Dykstra, P. A., & Hagestad, G. O. (2007). Roads less taken: Developing a nuanced view of older adults without children. *Journal of Family Issues*, 28, 1275-1310.
- Dykstra, P. A., & Liefbroer, A. C. (1995). Maatschappelijk aanzien van ouderen: De invloed van sociale herkomst, arbeidsmarktomstandigheden en gezinssituatie [Prestige of older adults: The impact of social background, labour market circumstances and family situation]. In B. C. M. Nitsche (Ed.), *Ouderen, wetenschap en beleid II* (pp. 55-77). Utrecht, Netherlands: NIG.
- Gierveld, J. (1969). *De ongehuwden* [The unmarried]. Alphen a/d Rijn, Netherlands: Samsom.
- Glenn, N. D., & McLanahan, S. (1981). The effects of offspring on the psychological well-being of older adults. *Journal of Marriage and Family*, 43, 409-421.
- Gurin, P., & Brim, O. G., Jr. (1984). Changes in self in adulthood: The example of sense of control. In P. B. Baltes & O. G. Brim Jr. (Eds.), *Life-span development and behavior* (Vol. 6, pp. 282-334). New York: Academic Press.
- Hagestad, G. O. (1991). Trends and dilemmas in life course research: An international perspective. In W. Heinz (Ed.), *Theoretical advances in life course research: Status passages and the life course* (Vol. 1, pp. 23-57). Weinheim, Germany: Deutscher Studien Verlag.

- Hagestad, G. O. (1996). On-time, off-time, out of time? Reflections on continuity and discontinuity from an illness process. In V. L. Bengtson (Ed.), *Adulthood and aging: Research on continuities and discontinuities, a tribute to Bernice Neugarten* (pp. 204-222). New York: Springer.
- Hagestad, G. O., & Call, V. R. A. (2007). Pathways to childlessness: A life course perspective. *Journal of Family Issues*, 28, 1338-1361.
- Hagestad, G. O., & Neugarten, B. L. (1985). Age and the life course. In R. H. Binstock & E. Shanas (Eds.), *Handbook of aging and the social sciences* (Vol. 2, pp. 35-61). New York: Van Nostrand Reinhold.
- Heckhausen, J. (1990). Erwerb und Funktion normativer Vorstellungen über den Lebenslauf. Ein entwicklungspsychologischer Beitrag zur sozio-psychischen Konstruktion von Biographien [Acquisition and function of normative conceptions about the lifecourse: A developmental-psychological contribution to the social construction of biographies]. In K. U. Mayer (Ed.), *Lebensverläufe und sozialer Wandel* [Special issue]. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 31, 351-373.
- Heinz, W. R., & Krüger, H. (2001). Life course: Innovations and challenges for social research. *Current Sociology*, 49, 29-45.
- Henkens, K., & Tazelaar, F. (1994). Early retirement of civil servants in the Netherlands. *Journal of Applied Social Psychology*, 24, 1927-1943.
- Hogan, D. P. (1981). *Transitions and social change: The early lives of American men*. New York: Academic Press.
- Houser, B. B., Berkman, S. L., & Beckman, L. J. (1984). The relative rewards and costs of childlessness for older women. *Psychology of Women Quarterly*, 8, 395-398.
- Kahn, R. L., & Antonucci, T. C. (1980). Convoys over the life course: Attachment, roles and social support. In P. B. Baltes & O. G. Brim, Jr. (Eds.), *Life-span development and behavior* (Vol. 3, pp. 254-283). New York: Academic Press.
- Keith, P. M. (1983). A comparison of the resources of parents and childless men and women in very old age. *Family Relations*, 32, 403-409.
- Kemkes-Grottenhaler, A. (2003). Postponing or rejecting parenthood? Results of a survey among female academic professionals. *Journal of Biosocial Science*, 35, 213-226.
- Kohli, M., Rein, M., Guillemand, A.-M., & van Gunsteren, H. (Eds.). (1991). *Time for retirement: Comparative studies of early exit from the labor force*. Cambridge, UK: Cambridge University Press.
- Koller, B. (2001). *Das Rentenalter wurde angehoben—zieht der Arbeitsmarkt mit?* [Raising the pension age—Will the labor market respond?] (Working Paper 07/2007). Nuremberg, Germany: IAB-Werkstattbericht.
- Lang, F. R. (1994). *Die Gestaltung informeller Hilfebeziehungen im hohen Alter: Die Rolle von Elternschaft und Kinderlosigkeit* [The management of informal help in old age: The influence of parenthood and childlessness]. Berlin, Germany: Nürnberg
- Lang, F. R. (2004). The availability and supportive functions of extended kinship ties in later life: Evidence from the Berlin Ageing Study. In S. Harper (Ed.), *Families in ageing societies* (pp. 64-81). Oxford, UK: Oxford University Press.
- Leisering, L., & Schumann, K. F. (2003). How institutions shape the German life course. In W. R. Heinz & V. W. Marshall (Eds.), *Social dynamics of the life course: Transitions, institutions, and interrelations* (pp. 193-209). New York: Aldine de Gruyter.
- Liefbroer, A. C., & Dykstra, P. A. (2000). *Levenslopen in verandering: Een studie naar ontwikkelingen in de levenslopen van Nederlanders geboren tussen 1900 en 1970* [Changing lives: A study on changes in the life courses of the Dutch 1900-1970 birth cohorts] (Scientific

- Council for Government Policy Series 107). Den Haag, Netherlands: Sdu Uitgevers. Available at [www.wrr.nl](http://www.wrr.nl)
- Maas, I., Borchelt, M., & Mayer, K. U. (1999). Generational experiences of old people in Berlin. In P. B. Baltes & K. U. Mayer (Eds.), *The Berlin Aging Study: Aging from 70 to 100* (pp. 83-110). New York: Cambridge University Press.
- Mancini, J. A., & Bliesner, R. (1989). Aging parents and adult children: Research in intergenerational relations. *Journal of Marriage and Family*, 51, 275-290.
- Margolis, O. S., Kutscher, A. H., & Marcus, E. R. (1988). *Grief and the loss of an adult child*. New York: Praeger.
- Matthews, R., & Martin-Matthews, A. (1986). Infertility and involuntary childlessness: The transition to nonparenthood. *Journal of Marriage and Family*, 48, 641-649.
- Mayer, K. U. (1988). German survivors of World War II: The impact on the life course of the collective experience of birth cohorts. In M. W. Riley (in association with B. J. Huber & B. B. Hess) (Ed.), *Social change and the life course, Vol. 1. Social structures and human lives* (pp. 229-246). Newbury Park, CA: Sage.
- Mayer, K. U., & Müller, W. (1986). The state and the structure of the life course. In A. B. Sørensen, F. E. Weinert, & L. R. Sherrod (Eds.), *Human development and the life course. Multidisciplinary perspectives* (pp. 217-245). Hillsdale, NJ: Lawrence Erlbaum.
- McLanahan, S., & Adams, J. (1987). Parenthood and psychological well-being. *Annual Review of Immunology*, 5, 237-257.
- Menaghan, E. G. (1989). Role changes and psychological well-being: Variations in effects by gender and role repertoire. *Social Forces*, 67, 693-714.
- Meyer, J. W. (1988). Levels of analysis. The life course as a cultural construction. In M. W. Riley, B. J. Huber, & B. B. Hess (Eds.), *Social change and the life course: Vol. 1. Social structures & human lives* (pp. 49-62). Newbury Park, CA: Sage.
- Moen, P. (1995). Gender, age and the life course. In R. H. Binstock & L. K. George (Eds.), *Handbook of aging and the social sciences* (4th ed., pp. 171-187). New York: Academic Press.
- Motel, A., & Wagner, M. (1993). Armut im Alter? Ergebnisse der Berliner Altersstudie zur Einkommenslage alter und sehr alter Menschen [Late life poverty? Findings from the Berlin Aging Study on income levels of old and very old people]. *Zeitschrift für Soziologie*, 22, 433-448.
- Müller, W. (1983). Frauenerwerbstätigkeit im Lebenslauf [Women's labor force participation over the life course]. In W. Müller, A. Wilms, & J. Handl (Eds.), *Strukturwandel der Frauenarbeit 1880-1980* (pp. 55-106). Frankfurt, Germany: Campus.
- Neugarten, B. L. (1969). Continuities and discontinuities of psychological issues into adult life. *Human Development*, 12, 121-130.
- Oppenheimer, V. K. (1994). Women's rising employment and the future of the family in industrial societies. *Population and Development Review*, 20, 293-342.
- Pott-Buter, H. (1993). *Facts and fairy tales about female labor, family and fertility: A seven-country comparison, 1850-1990*. Amsterdam: Amsterdam University Press
- Rempel, J. (1985). Childless elderly: What are they missing? *Journal of Marriage and Family*, 47, 343-348.
- Riley, M. W. (1986). Overview and highlights of a sociological perspective. In A. B. Sørensen, F. E. Weinert, & L. R. Sherrod (Eds.), *Human development and the life-course: Multidisciplinary perspectives* (pp. 153-175). Hillsdale, NJ: Lawrence Erlbaum.
- Rindfuss, R. R., Swicegood, C. G., & Rosenfeld, R. A. (1987). Disorder in the life course: How common and does it matter? *American Sociological Review*, 52, 785-801.



- Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life course*. New York: Aldine de Gruyter.
- Rubin, S. S. (1993). The death of a child is forever: The life course impact of child loss. In M. S. Stroebe, W. Stroebe, & R. O. Hansson (Eds.), *Handbook of bereavement: Theory, research, and intervention* (pp. 285-299). Cambridge, UK: Cambridge University Press.
- Schiepers, J. M. P. (1988). Huishoudensequivalentiefactoren volgens de budgetverdelingsmethode [Family equivalence scales using the budget distribution method]. *Supplement bij de Sociaal-economische Maandstatistiek*, 1998/2, 28-36.
- Shanas, E. (1979). Social myth as hypothesis: The case of the family relations of old people. *The Gerontologist*, 19, 3-9.
- Sixma, H., & Ultee, W. C. (1983). Een beroepsprestigeschaal voor Nederland in de jaren tachtig [An occupational prestige scale for the eighties in the Netherlands]. *Mens en Maatschappij*, 58, 360-382.
- Smith, J., Fleeson, W., Geiselman, B., Settersten, R. A., Jr., & Kunzmann, U. (1999). Sources of well-being in very old age. In P. B. Baltes & K. U. Mayer (Eds.), *The Berlin Aging Study: Aging from 70 to 100* (pp. 450-471). New York: Cambridge University Press.
- Statistisches Bundesamt. (Ed.). (2002). *Datenreport 2002* [Statistical report 2002]. Bonn, Germany: Bundeszentrale für politische Bildung.
- Toulemon, L. (1996). Very few couples remain voluntarily childless. *Population: An English Selection*, 8, 1-28.
- Troll, L. E., Miller, S. J., & Atchley, A. C. (1979). *Families in later life*. Belmont, CA: Wadsworth.
- van Balen, F. (1991). *Een leven zonder kinderen: Beleving, stress en aanpassing* [A life without children: Experience, stress and adaptation]. Unpublished doctoral dissertation, University of Amsterdam.
- van Tilburg, T. G. (1995). Network composition. Delineation of the social network and differences in network size. In C. P. M. Knipscheer, J. de Jong Gierveld, T. G. van Tilburg, & P. A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 83-96). Amsterdam: VU University Press.
- Veevers, J. (1980). *Childless by choice*. Toronto, Canada: Butterworth.
- Verooff, J., Douvan, E., & Kulka, R. A. (1981). *The inner American: A self-portrait from 1957 to 1976*. New York: Basic Books.
- Wagner, M., & Motel, A. (1996). Die Qualität der Einkommensmessung bei alten Menschen [The quality of income measurement among older adults], *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 48, 493-512.
- Wagner, M., Schütze, Y., & Lang, F. R. (1999). Social relationships in old age. In P. B. Baltes & K. U. Mayer (Eds.), *The Berlin Aging Study: Aging from 70 to 100* (pp. 282-301). New York: Cambridge University Press.
- Wagner, M., & Wolf, Ch. (2001). Altern, Familie und soziales Netzwerk [Aging, family and social network]. *Zeitschrift für Erziehungswissenschaft*, 4, 529-554.
- Wegener, B. (1988). *Kritik des Prestiges* [Criticizing prestige]. Opladen, Germany: Westdeutschen Verlag.
- Wenger, G. C. (2001). Ageing without children: Rural Wales. *Journal of Cross-Cultural Gerontology*, 16, 79-109.
- Wu, Z., & Pollard, M. S. (1998). Social support among unmarried childless elderly persons. *Journal of Gerontology: Social Sciences*, 53B, S324-S335.